
Meridian 1

Meridian Companion

Product Overview

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Introduction

The Meridian Companion system offers digital wireless capabilities to portable telephone users. With Meridian Companion, users can travel around their work sites while answering, initiating, continuing, and transferring phone calls.

Meridian Companion works with the systems and X11 software shown in Table 1.

Table 1: Meridian 1 systems supporting Meridian Companion

Meridian 1 systems	X11 and X11 international software	2500 features and Message Waiting Indicator	CLID, CPND, Wireless Privacy
Options 11 through 81	Release 15–19	Yes	No
Options 11 through 81	Release 20B	Yes	Yes
To support Meridian Companion, ST/STE, RT, NT, and XT systems must be upgraded to include an IPE Module or CE/PE Module.			

A Meridian Companion system is customized to meet the needs of a specific site. Base Stations, which have two radios each for transmitting and receiving calls, are strategically placed throughout the site to provide the desired level of coverage. Standard telephone wiring connects each Base Station to the Companion Meridian Controller card or to a Companion Meridian radio line card.

System configuration

Meridian Companion software has the following components:

- Meridian 1 X11 software enables Meridian Companion to access Meridian 1 communications features
- Companion controller software, which provides mobility functions, terminal-based administration, and operational and maintenance features.

The Companion Meridian Controller card can support one Administration Terminal or Remote Access Device (RAD), up to 15 Base Stations, and up to 16 portable telephone users. A RAD connects an Administration PC running Companion Manager or Companion Diagnostic Software (CDS) to the Companion Meridian Controller card. For a system that uses both a RAD and an Administration Terminal, the Companion Meridian Controller card can support up to 14 Base Stations.

Two optional expansion cards, the Companion Meridian radio line card and the Companion Meridian line card, add user and Base Station capacity. The Companion Meridian radio line card supports up to 16 Base Stations and 16 users. The Companion Meridian line card supports up to 16 users.

Table 2 shows the possible card combinations and the number of portables that can be supported for each combination. For example, combining two CMLCs with three CMRCs, (2,3), produces a system that can support 81 to 96 portable users with 48 to 63 Base Stations.

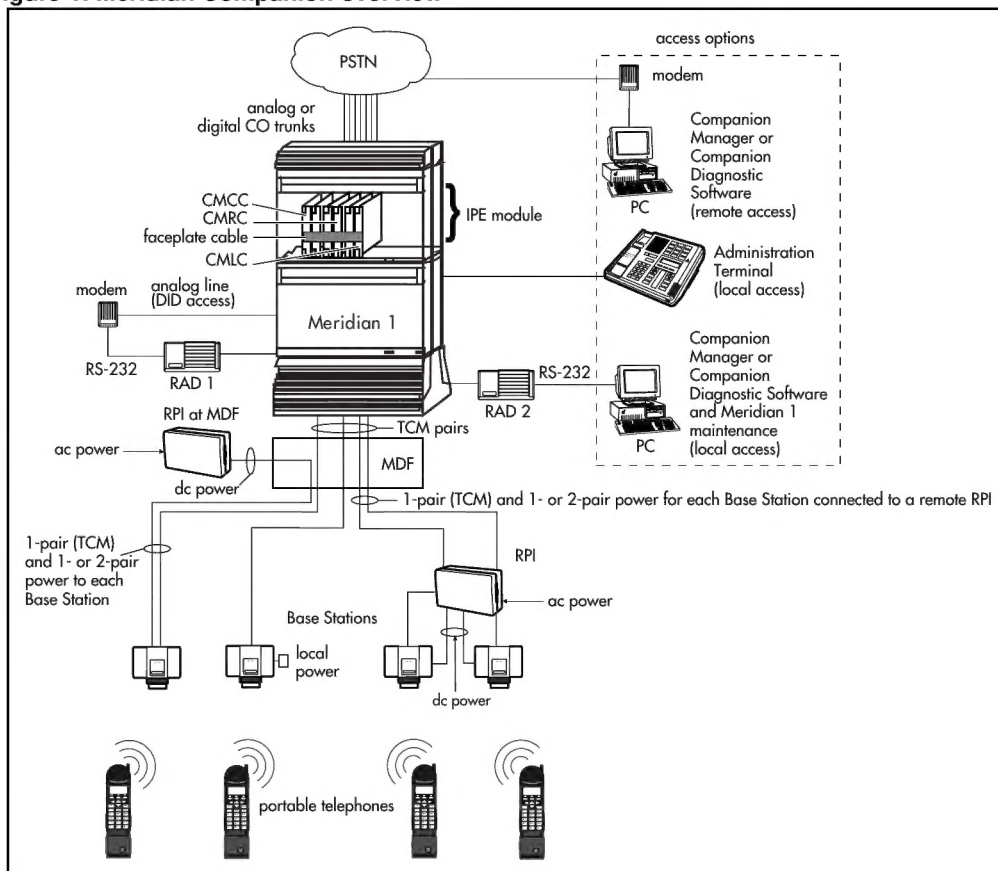
Figure 1 shows an overview of the Meridian Companion configuration.

Table 2: Base Stations and portable telephones with different card combinations

Option 11 Limit →	240	(14,0)							
	224	(13,0)	(12,1)						
	208	(12,0)	(11,1)	(10,2)					
	192	(11,0)	(10,1)	(9,2)	(8,3)				
	176	(10,0)	(9,1)	(8,2)	(7,3)	(6,4)			
	160	(9,0)	(8,1)	(7,2)	(6,3)	(5,4)	(4,5)		
	144	(8,0)	(7,1)	(6,2)	(5,3)	(4,4)	(3,5)	(2,6)	
	128	(7,0)	(6,1)	(5,2)	(4,3)	(3,4)	(2,5)	(1,6)	(0,7)
	112	(6,0)	(5,1)	(4,2)	(3,3)	(2,4)	(1,5)	(0,6)	
	96	(5,0)	(4,1)	(3,2)	(2,3)	(1,4)	(0,5)		
	80	(4,0)	(3,1)	(2,2)	(1,3)	(0,4)			
	64	(3,0)	(2,1)	(1,2)	(0,3)				
	48	(2,0)	(1,1)	(0,2)					
	32	(1,0)	(0,1)						
	16	(0,0)							
		15	31	47	63	79	95	111	127
	Base Stations								

Note: All systems require a CMCC card. CMLC and CMRC cards are shown as (X,Y).

Figure 1: Meridian Companion overview



Meridian Companion documentation set

For information about deployment, refer to *Meridian Companion Site Planning Reference Manual* and *Guide to Site Planning*.

For information about installing the system, configuration programming, or maintenance programming, refer to *Meridian Companion Installation and Maintenance Guide*.

For information about system configuration, refer to *Meridian Companion Programming and Provisioning Record*.

For information about customizing the Meridian Companion system using the Administration Terminal refer to *Meridian Companion Administration Terminal and Operations Guide*.

For information about installation, operation, administration, and maintenance using Companion manager, refer to *Companion Manager Installation and Operations Guide*.

For more information about using the Companion Deployment Tool, refer to *Companion Deployment Tool User Guide*.

For information about operating characteristics of a wireless system refer to *Companion Diagnostic Software (CDS) User Guide*.

User guides and quick reference cards are provided with each portable telephone used with the Meridian Companion system.

For a description of 2500 features, refer to *X11 Features and Services*. For a complete list of prompts and service changes, refer to *X11 input/output guide*.

Meridian Companion features

The Meridian Companion system provides access to a range of features available through a Meridian 1 system.

X11 releases 15 through 19 provide standard 2500 calling features. Users can access these features with special prefix (SPRE) codes or flexible feature codes (FFCs).

X11 release 20B supports the features available with earlier releases as well as the following:

- message waiting indicator
- Call Party Name Display shows the name of the other party.
- Calling Line Identification shows the number (or extension) of the other party.
- Wireless Privacy provides separate calling capability for a portable telephone, that is twinned with a wired telephone.

Note: Message waiting indicator, Call Party Name Display, and Calling Line Identification are available only on portable telephones that have a display.

Hardware and software requirements

Hardware

Table 3 lists the components of a Meridian Companion system. Requirements depend on system configuration.

Table 3: Hardware components

NT code	Hardware component	Use
NTCK90AA RIs 06	Companion Meridian Controller card	- controls Meridian Companion system operation - supports up to 15 Base Stations, 1 Administration Terminal, and 16 wireless terminal numbers
NTCK94CC	ROM daughter card	contains software required for all systems
NTCK91AA RIs 04	Companion Meridian radio line card	provides support for up to 16 Base Stations and 16 wireless terminal numbers
NTCK93	Companion Meridian line card	provides support for up to 16 wireless terminal numbers
NPS50843-7L01	interboard faceplate cable harness (A0615589)	connects cards to neighboring cards

Table 3: Hardware components (continued)

NT code	Hardware component	Use
NPS50843-7L02	bypass faceplate cable harness (A0616481)	connects cards across the NT8D01 Controller card (if necessary)
NPS90781-20L01	Companion Meridian radio line card maintenance cable (A0615596)	attached to cable harness to bypass a Companion Meridian radio line card that is being removed
NPS90781-20L02	Companion Meridian line card maintenance cable (A0615597)	attached to cable harness to bypass a Companion Meridian line card that is being removed
A0345353	A/B box	for PC-based operations, administration, and maintenance software
NT2K2AA	null modem cable: 10 feet (A0398761); 25 feet (A0398762)	for remote PC operations, administration, and maintenance software
NT2K91AA	straight RS-232 cable: 10 feet (A0399143); 25 feet (A0399144)	for local PC operations, administration, and maintenance software
	Companion Deployment Tool (CDT)	determines where to place Base Stations
NT8B80	remote access device	for using PC operations, administration, and maintenance software
	Administration Terminal ¹	programs and maintains Meridian Companion system
	Base Stations (C1110) and optional external antennas (indoor directional, indoor omnidirectional, outdoor omnidirectional)	contain radios that transmit and receive signals to and from portable telephones

Table 3: Hardware components (continued)

NT code	Hardware component	Use
	remote power interconnect unit	provides remote power for multiple Base Stations
	plug-top power supply	provides local power to a Base Station (alternative to RPI)
A0382082	lightning arrester included with outdoor antenna A0637293 for PCI system	for each outdoor external antenna
	primary protectors for Base Stations and cards in an exposed application	provides voltage surge protection for exposed wiring where it enters a building
	secondary protectors for Base Stations and cards in an exposed application: Oneac Corp. Model 6DP or ITW LINX Model MP1A-90-27	provide overcurrent protection and voltage surge protection, for exposed wiring between a primary protector and a Base Station or Meridian Companion card
	portable telephones: Companion C3050	for making telephone calls
	personal computer (Administration PC)	to run operations, administration, and maintenance software
	9600 baud, Hayes-compatible modem	for remote connection between personal computer and RAD

1. The part numbers that are omitted vary depending on the market and are specified in market-specific product bulletins.

Software

- Meridian 1 X11 release 15 or later
- Companion Meridian Controller card installed on the Companion Meridian Controller card ROM

Companion Diagnostic Software (CDS) and Companion Manager are optional.



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